



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR  | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|-----------------------|---------------------|------------------|
| 10/534,276      | 05/06/2005  | Joan Wichard Strijker | NL02 1140 US        | 9794             |

24738 7590 03/07/2007  
PHILIPS ELECTRONICS NORTH AMERICA CORPORATION  
INTELLECTUAL PROPERTY & STANDARDS  
1109 MCKAY DRIVE, M/S-41SJ  
SAN JOSE, CA 95131

|          |
|----------|
| EXAMINER |
|----------|

RILEY, SHAWN

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2838

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE  | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS                               | 03/07/2007 | PAPER         |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/534,276

Applicant(s)

STRIJKER ET AL.

Examiner

Shawn Riley

Art Unit

2838

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on amendment and remarks of 6 Feb 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 7-11 is/are rejected.
- 7) ☒ Claim(s) 2-6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Arguments*

Applicants remarks and amendment of 6 Feb 2007 have been considered but not deemed persuasive. Applicant states:

In Fig. 4 of Plagge, a junction of an inductor N1 and a main switch T1 is coupled to further circuitry. The circuitry, however, is not a measuring circuit coupled to a junction of the inductor and the main switch to obtain a measuring signal being indicative of a voltage across the main current path. Rather, the Zener diode D2 and the diode D3 form a snubber circuit as described at col. 6, lines 36-43. The resistor R.2 is a starter resistor as described at col. 4, lines 39-68 and subsequent. Circuitry coupled to the junction of R2 and R5 functions as a positive feedback circuit that rapidly turns the main switch T1 fully on during a "forward phase" in which energy is stored in the transformer. Subsequently, the switch TI is turned off, and a "flyback phase" ensues in which energy is transferred from the transformer to the load in the form of a current. This cycle is repeated.

The claim recites "a measuring circuit....indicative of a voltage across the main current path".

This is what (Cp/ R4/Rs/C2/R1) did and now, specifically with applicants new amendment, what (C<sub>2</sub>/ R<sub>2</sub>/R<sub>5</sub>) does.

For at least the above reasons this action is made final.

Art Unit: 2838

***Specification***

1. The disclosure is objected to because of the following informalities: title headings are not included in the specification. Appropriate correction is required.

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. Single ended converter with overvoltage protection.

***Claim Objections***

3. Claim 8 is objected to under 37 C.F.R. 1.75(a) because of the following informalities: the wording of claim 6 leads the examiner to believe that it was meant to depend on claim 2 since no diode or capacitance was recited in claim 1. Appropriate correction is required.

***Claim Rejections - 35 U.S.C. § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 2838

2. Claims 1 and 7-11 are rejected under 35 U.S.C. §102(b) as being fully anticipated by Plagge et al. (U.S. Patent 4,939,632). Plagg et al shows,<sup>1</sup> (in, e.g., the(ir) figures 2 & 4 and corresponding disclosure)

1. A power converter comprising: an inductor (N1) and a main switch (T1) having a main current path, the inductor and the main current path being arranged in series for receiving a DC-input voltage (at node 1), a measuring circuit ( $C_2/R_2/R_3$ ) coupled to a junction of the inductor and the main switch to obtain a measuring signal being indicative of a voltage across the main current path, and a control circuit (input into base of T1) for controlling on-periods and/or off-periods of the main switch to stabilize an output voltage supplied to a load, and having an input (base of T2) for receiving the measuring signal to protect the main switch against an overvoltage.

As to claim 7;

A power converter as claimed in claim 1, wherein the control circuit comprises an comparator ( $C_p$ ) for comparing the measuring signal with a reference signal (at node 5)

---

<sup>1</sup> Note claims will be addressed individually and the material in parentheses are the examiner's annotated comments. Further unless needed for clarity reasons, recited limitation(s), will be annotated only upon their first occurrence. Annotated claims begin with the phrase "As to claim". Claims that are not annotated are seen as having already had the invention(s) addressed previously in an annotated claim and may be repeated for convenience of the applicant/examiner. Bolded words/phrases indicate rejected material based 112 paragraph rejections. Underlined words/phrases indicate objected to material. For method claims, note that under MPEP 2112.02, the principles of inherency, if a prior art device, in its normal and usual operation, would necessarily perform the method claimed, then the method claimed will be considered to be anticipated by the prior art device. When the prior art device is the same as a device described in the specification for carrying out the claimed method, it can be assumed the device will inherently perform the claimed process. In re King, 801 F.2d 1324, 231 USPQ 136 (Fed. Cir. 1986). Therefore the previous rejections based on the apparatus will not be repeated.

Art Unit: 2838

to halt the operation of the power converter when the measuring signal crosses the reference signal indicating that a voltage across the main switch is higher than a particular value.

As to claim 8;

*A power converter as claimed in claim 1, wherein the diode (D1) and the capacitor(C1/C2) are dimensioned to operate as a peak-limiter.*

As to claim 9;

An apparatus comprising the power converter as claimed in claim 1 (see rejection of claim 1).

As to claim 10;

An apparatus as claimed in claim 9, wherein the apparatus comprises a processing circuit for processing an input signal into an output signal to be made audible via a sound transducer and/or to be displayed on a display device and the power converter as claimed in claim 1, wherein the load comprises the processing circuit (the motor makes an audible sound).

As to claim 11;

A control circuit for use in the power converter claim 1 (see rejection of claim 1)

Art Unit: 2838

***Allowable Subject Matter***

3. Claims 2-6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. As allowable subject matter has been indicated, applicant's response must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 C.F.R. § 1.111(b) and section 707.07(a) of the M.P.E.P.

5. The following is an examiner's statement of reasons for allowance: As to claim 2, no prior art uncovered anticipates or renders obvious applicant(s) claimed power converter including a series arrangement of a diode and a capacitors, the series arrangement of the diode and the capacitor being coupled in parallel with the inductor, the input of the control circuit being coupled to a junction of the series arrangement of the diode and the capacitors.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


1.

***Conclusion***

Art Unit: 2838

Any inquiry from other than the applicant/attorney of record concerning this communication or earlier communications from the Examiner should be directed to the Patent Electronic Business Center (EBC) at 1.866.217.9197. Any inquiry from a member of the press concerning this communication or earlier communications from the Examiner or the application should be directed to the Office of Public Affairs at 703.305.8341. Any inquiry from the applicant or an attorney of record concerning this communication or earlier communications from the Examiner should be directed to Examiner Riley whose telephone number is 571.272.2083. The Examiner can normally be reached Monday through Thursday from 7:30-6:00 p.m. Eastern Standard Time. The Examiner's Supervisor is Karl Easthom who can be reached at 571.272.1989. Any inquiry about a case's location, retrieval of a case, or receipt of an amendment into a case or information regarding sent correspondence to a case **should be directed to 2800's Customer Service Center** at 571.272.2815. Any papers to be sent by fax MUST BE sent to fax number **571-273-8300**. Any inquiry of a general nature of this application should be **directed to the Group receptionist** whose telephone number is 571.272.2800. Status information of cases may be found at <http://pair-direct.uspto.gov> wherein unpublished application information is found through private PAIR and published application information is found through public PAIR. Further help on using the PAIR system is available at 1.866.217.9197 (Electronic Business Center).

March 07

---

*Shawn Riley*  
*Primary Examiner*